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# The Relationship between Educational Pathways and Occupational Outcomes at the Intersection of Gender and Social Origin

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# Introduction

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- In various outcomes (e.g., educational attainment, occupational status, income, ...), differences by gender and social origin have been documented (Becker & Müller 2011, Blau & Kahn 2017, Mood 2017).
- When do they appear in the life course? Do they intersect (Crenshaw 1991; McCall 2005)?
- TREE-Data are especially suited to explore the emergence of such differences in the long term (age ~16-30)

# Research Questions

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1. Are there differences in student performance by parental status and gender?

2. Are there differences in educational pathways by parental status and gender, overall and net of performance (primary and secondary effects of social origin (Bourdieu and Passeron 1971; Boudon 1974))?

3. Do these differences lead to unequal outcomes in young adults' early working life, namely occupational status and income?

# Data & Research Design I

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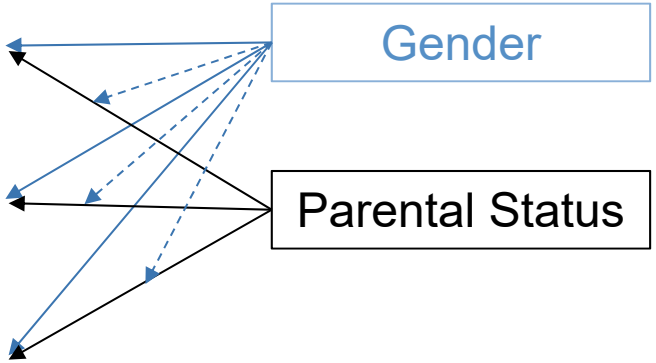
## > Analytic model

1. Performance
2. Educational Trajectory
3. Occupational Status and Salary




## > Data

— PISA 2000

— TREE 1, Waves 1-9 (2001-2014)

# Data & Research Design II

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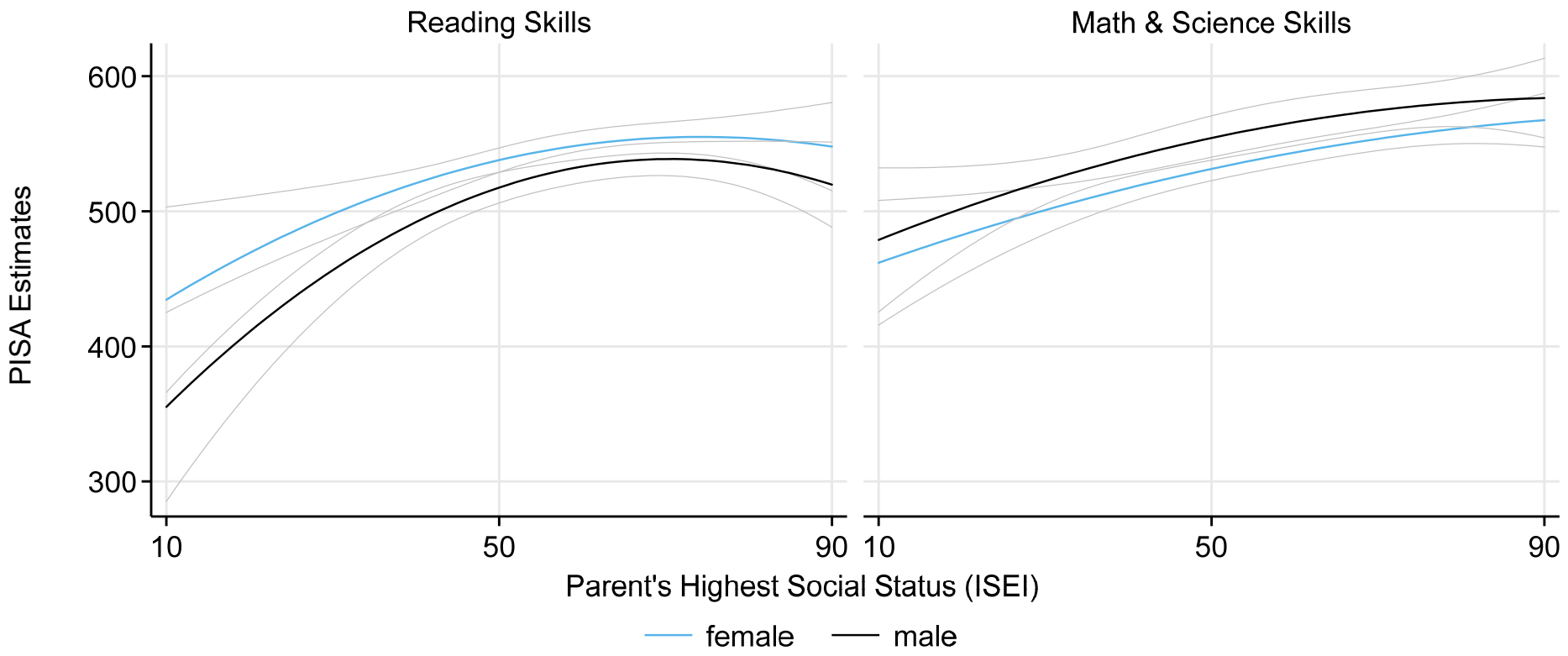
## > Methods

— Linear regressions (for effects on skills, social status and salary)
— Sequence- & cluster-analyses (for educational trajectories)
— Multinomial logistic regressions
(for probabilities of belonging to a certain cluster)

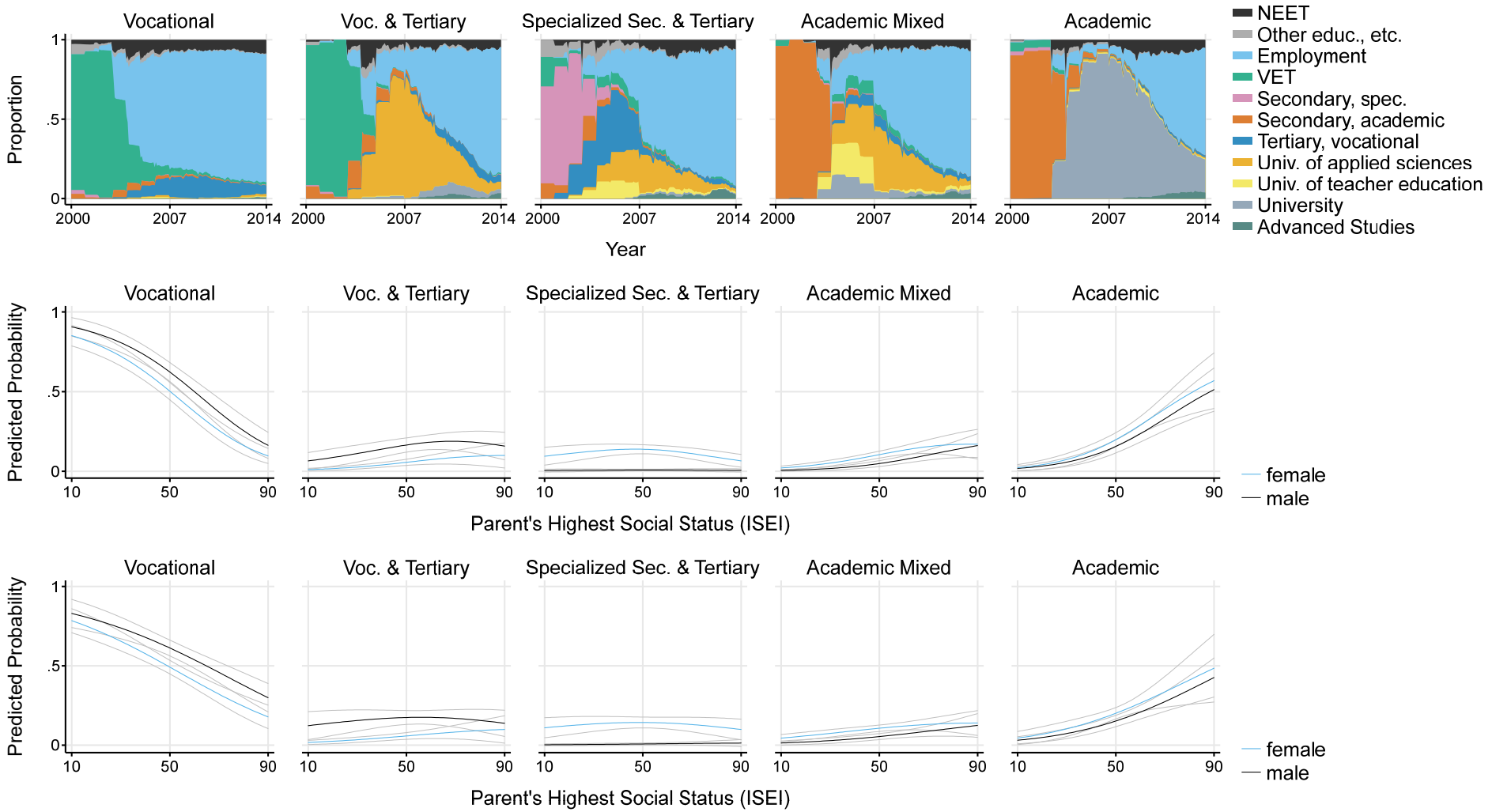
— Example of an individual sequence


— A = Education B = Employment C = Unemployed

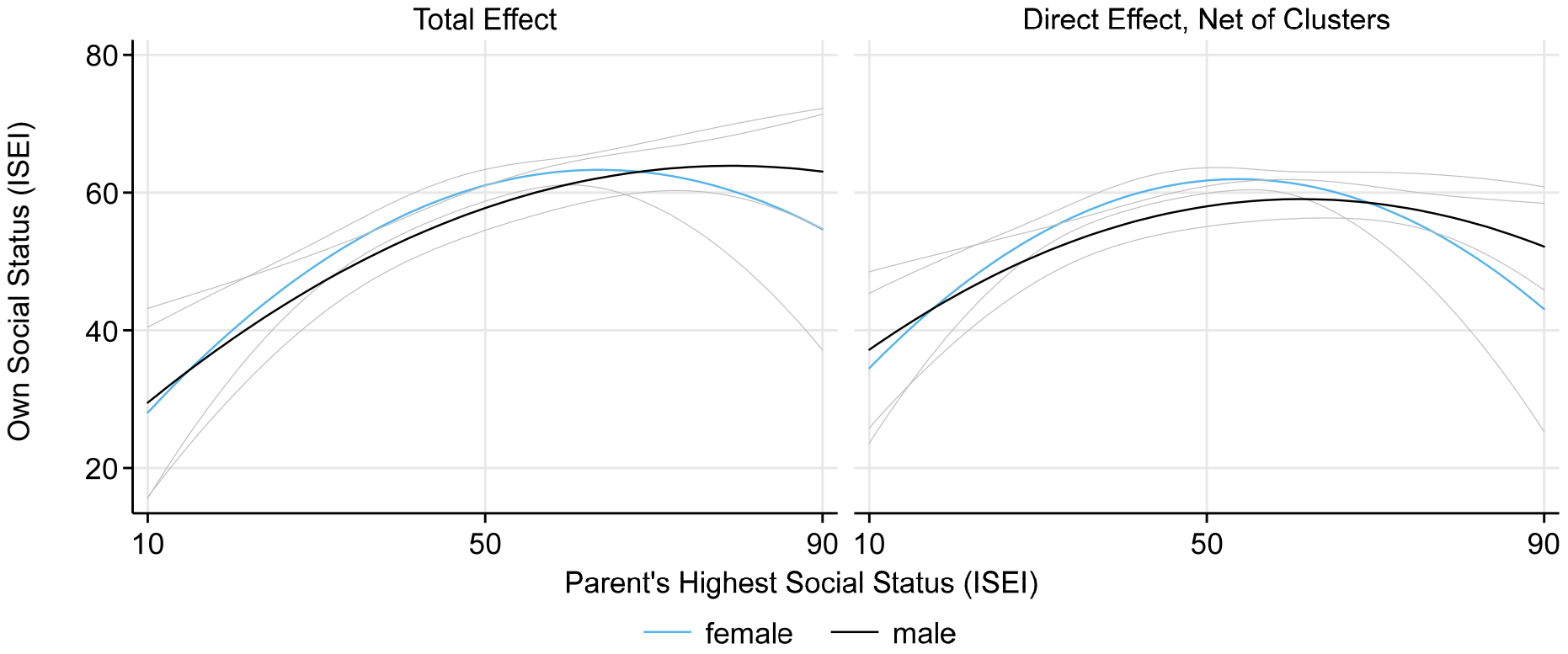
# Results Step 1: Skills



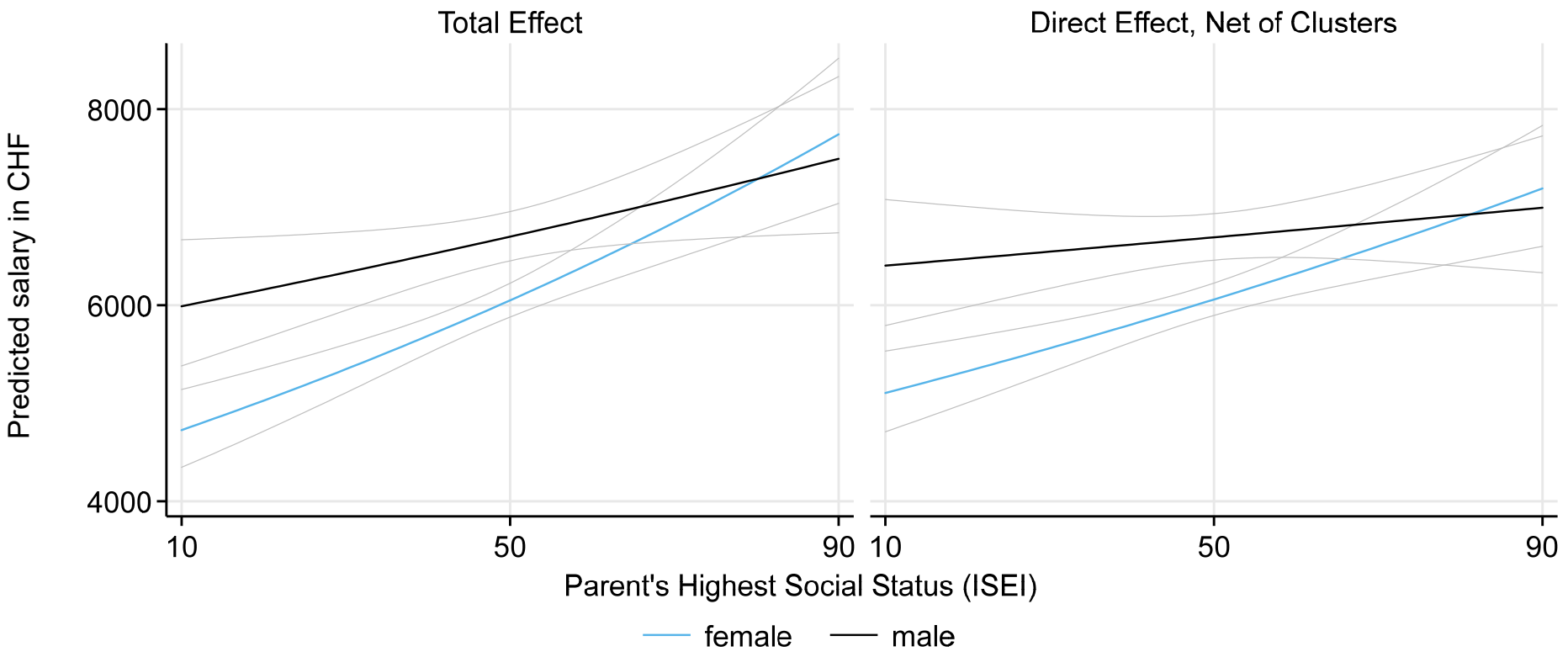
# Results Step 2: Educational Trajectories



# Results Step 3 (I): Own Social Status (ISEI)



# Results Step 3 (II): Salary



# Conclusions

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- Differences in reading and mathematical skills by parental status and gender.
- Men overrepresented in vocational and women in specialized and academic secondary tracks.
- Differences in own status and salary by parental status and gender.
- Interaction effect by social origin and gender in step 3 (salary).

# Literature


Becker, Rolf und Walter Müller (2011). Bildungsungleichheiten nach Geschlecht und Herkunft im Wandel. In: Hadjar, Andreas (Hg.). *Geschlechtsspezifische Bildungsungleichheiten* (253 S.). Wiesbaden: VS Verlag für Sozialwissenschaften.

Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, *55*(3), 789-865.

Boudon, Raymond (1974). *Education, Opportunity and Social Inequality: Changing Prospects in Western Society*. New York: John Wiley & Sons Inc.

Bourdieu, Pierre und Jean-Claude Passeron (1971). *Die Illusion der Chancengleichheit: Untersuchungen zur Soziologie des Bildungswesens am Beispiel Frankreichs*. Stuttgart: Klett.

Crenshaw, Kimberle (1991). Mapping the Margins: Intersectionality, Identity Politics, and Violence against Women of Color. *Stanford Law Review, 43*(6), 1241-1299.

Dahrendorf, Ralf (1965). *Bildung ist Bürgerrecht: Plädoyer für eine aktive Bildungspolitik*. Hamburg: Rohwolt.

McCall, Leslie (2005). The Complexity of Intersectionality. *Signs, 30*(3), 1771-1800.

Mood, C. (2017). More than money: Social class, income, and the intergenerational persistence of advantage. *Sociological Science*, *4*, 263-287.

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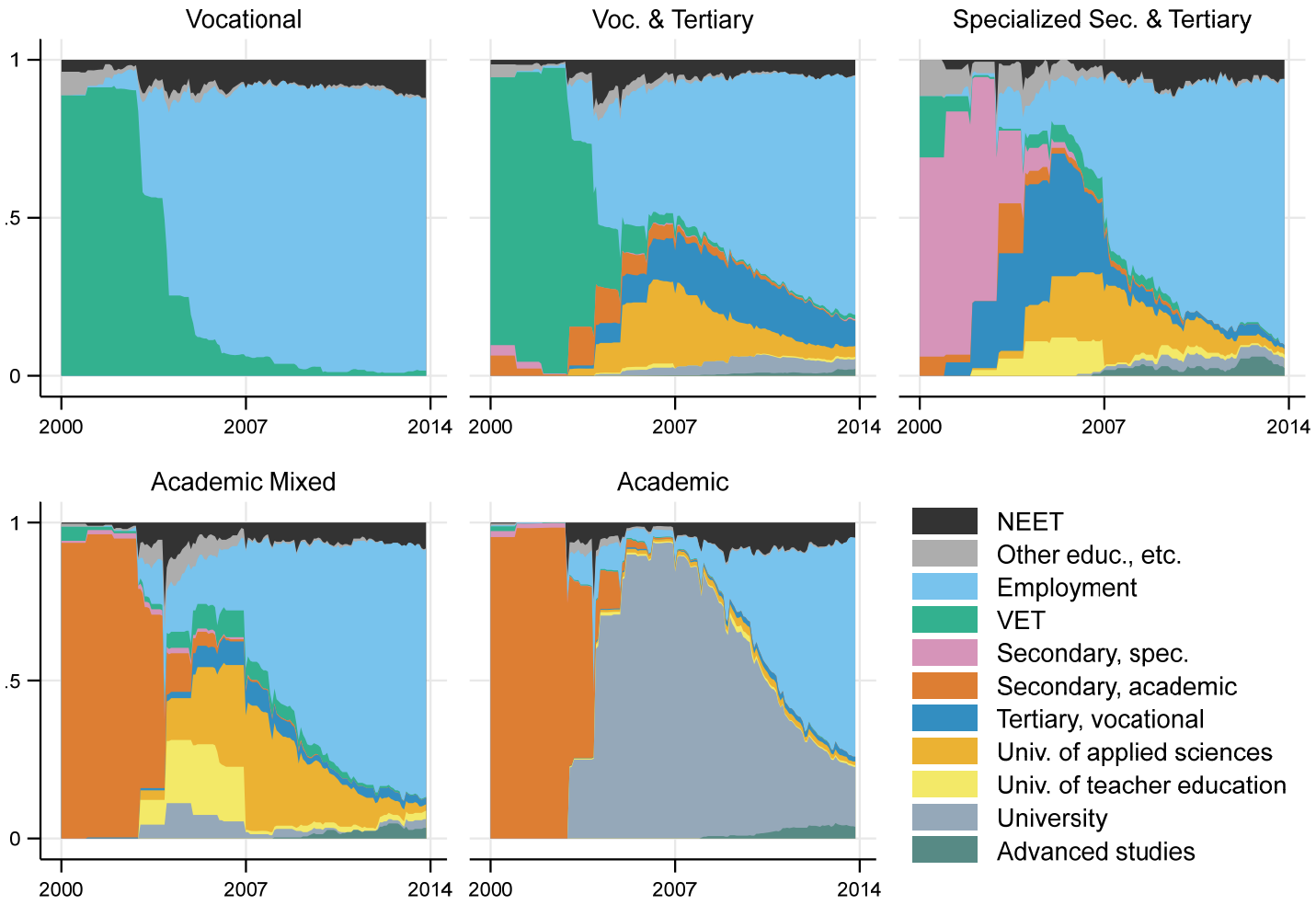
# Robustness Checks (I)



# Robustness Checks (II)

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| | Log std. monthly gross salary | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | End of education at least 2 years ago | | | | Exclusion of the lowest and highest 1% | | | |
| Women | -0.362*** | (0.0856) | -0.350*** | (0.0778) | -0.245** | (0.0751) | -0.243*** | (0.0699) |
| Highest parental ISEI | 0.00151 | (0.00121) | -0.000286 | (0.00106) | 0.00228* | (0.00109) | 0.000824 | (0.00106) |
| Women*Highest parental ISEI | 0.00496** | (0.00163) | 0.00458** | (0.00146) | 0.00295* | (0.00138) | 0.00278* | (0.00125) |
| Self-employed | -0.0800 | (0.0888) | -0.0618 | (0.0896) | -0.0577 | (0.0781) | -0.0408 | (0.0796) |
| Voc. & Tertiary | | | 0.176*** | (0.0254) | | | 0.170*** | (0.0236) |
| Specialized Sec. & Tertiary | | | 0.0656* | (0.0310) | | | 0.0786* | (0.0316) |
| Academic Mixed | | | 0.150*** | (0.0339) | | | 0.143*** | (0.0307) |
| Academic | | | 0.202*** | (0.0299) | | | 0.144*** | (0.0303) |
| Constant | 8.744*** | (0.0689) | 8.762*** | (0.0609) | 8.689*** | (0.0625) | 8.701*** | (0.0587) |
| Observations | 1591 | | 1591 | | 1829 | | 1829 | |

Standard errors in parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

# Theory I

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> **Inequalities by social origin and gender**

— Primary and secondary effects of social origin (Bourdieu and Passeron 1971; Boudon 1974)

— Intersectionality (Crenshaw 1991; McCall 2005)

# Theory II

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## > Intersectionality

— Origin: Black Feminism in the USA about 1990

— But: Idea already present in German educational research of the 1960ies with the artificial character of the «catholic working class girl from the countryside» (Dahrendorf, 1965)

— Considers multiple dimensions of inequality

— Not necessarily additive

# Intersectionality in educational research

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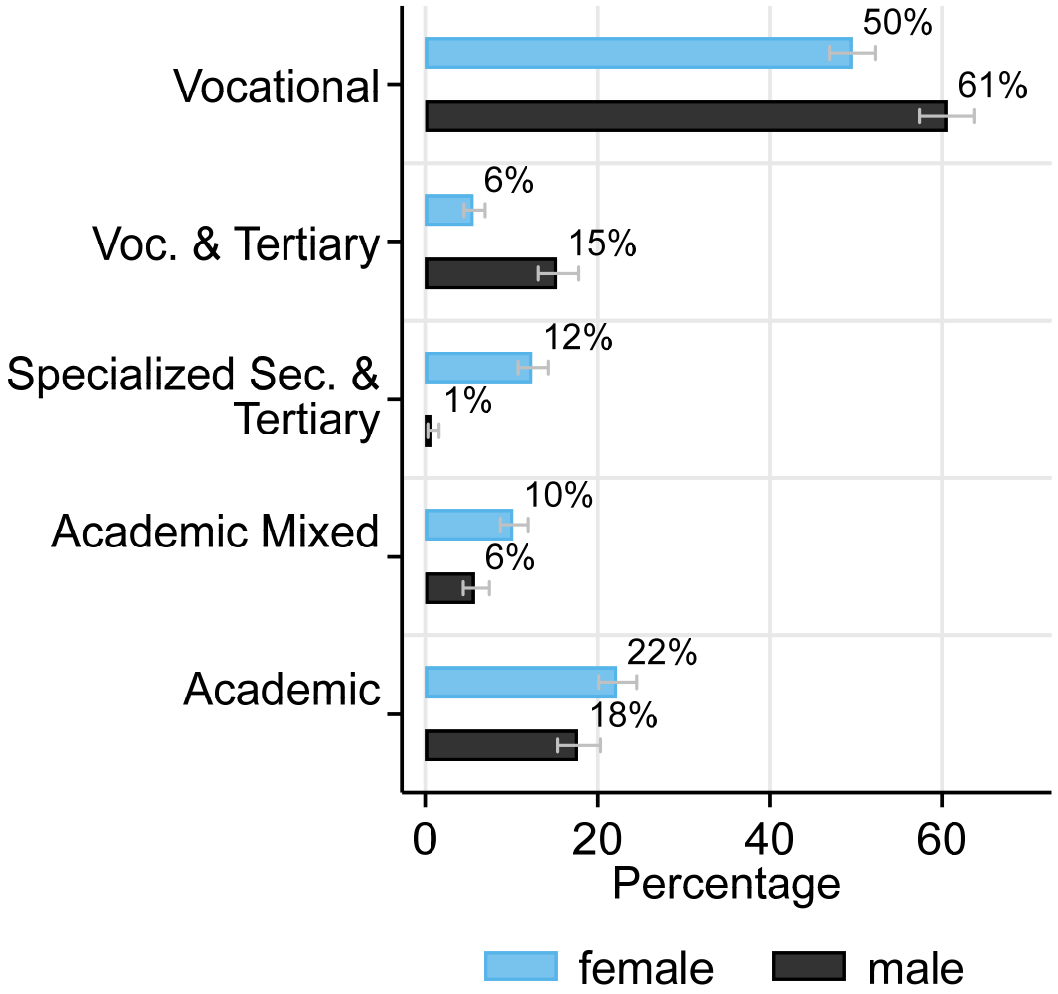
- Educational expansion is gender specific (Becker & Müller 2011)

- Reading skills: Gender more important than SES or migration
- Maths skills: SES more important (Gottburgsen & Gross 2012)

- Among low SES students white British achieve lower scores than ethnic minorities
- No interactions between gender and SES (Strand 2014)

# Results Step 2 (II)



# Results Step 3 (III)